



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,429	09/17/2004	Terrence M. Fulkerson	11694/04384	5428
27483 7590 10/09/2007 CALFEE, HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			EXAMINER BERTHEAUD, PETER JOHN	
			ART UNIT	PAPER NUMBER
			3746	
			MAIL DATE	DELIVERY MODE
			10/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/711,429

Applicant(s)

FULKERSON ET AL.

Examiner

Peter J. Bertheaud

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,8,9,17-20 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 8, 9, 17-20, and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date See Continuation Sheet.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/6/05, 5/31/05, 9/26/05, 4/27/06, 7/10/06.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of 1, 4, 8, 9, 17-20, and 27-31 in the reply filed on 7/2/2007 is acknowledged. Therefore, claims 2-3, 5-7, 10-16, and 21-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/2/2007.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 8, 9, 17-20, and 27-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleineidam 7,150,585.

Kleineidam discloses an apparatus for the conveyance of powdered material comprising a pump chamber (see 10) defined in part by a gas permeable member 50; a first pinch valve (see 30 at inlet 14) and a second pinch valve (see 30 at outlet 18) wherein each said pinch valve comprises a member 36 that defines part of a flow path for material through the pump, and wherein said pinch valve members open and close

Art Unit: 3746

in response to pneumatic pressure applied thereto (see col. 5, lines 11-16); wherein during pump operation material flows into said chamber under negative pressure and material flows out of said chamber under positive pressure (see col. 5, lines 61-67 and abstract); said first and second pneumatic pinch valves being operable to control flow of material into and out of said chamber 10. Kleineidam further discloses that first and second pinch valves can be separately actuated. Kleineidam also discloses a second pump chamber 12 and third (see 30 at inlet 16) and fourth (see 30 at outlet 20) pneumatic pinch valves, wherein material is transferred to a common outlet by alternate flow through said first 10 and second 12 pump chambers (see configuration in Fig. 2). Kleineidam further discloses that the first, second, third and fourth valves can be separately actuated.

Kleineidam discloses an apparatus for the conveyance of powdered material comprising a pump chamber 10 defined in part by a gas permeable member 50 wherein during pump operation material flows into said pump chamber 10 under negative pressure and material flows out of said pump chamber under positive pressure (see col. 5, lines 61-67 and abstract); a first pinch valve (see 30 at inlet 14) and a second pinch valve (see 30 at outlet 18) wherein each said pinch valve comprises a member 36 that defines part of a flow path for material through the pump, and wherein said pinch valve members open and close in response to pneumatic pressure applied thereto; said first and second pneumatic pinch valves being operable to control flow of material into and out of said pump chamber 10. Kleineidam further discloses that the pinch valves can be independently actuated open and closed with respect to each other. Kleineidam also

Art Unit: 3746

discloses that the pinch valves can be independently actuated open and closed with respect to application of negative and positive pressure to said pump chamber 10.

Kleineidam further discloses that the pinch valves can be independently actuated open and closed with respect to each other.

Kleineidam discloses an apparatus for the conveyance of powdered material comprising a pump chamber 10 defined in part by a gas permeable member 50 disposed in a pressure chamber 52; a first pinch valve (see 30 at inlet 14) and a second pinch valve (see 30 at outlet 18) wherein each said pinch valve comprises a member 36 that defines part of a flow path for material through the pump; wherein during pump operation material flows into said chamber under negative pressure and material flows out of said chamber under positive pressure (see col. 5, lines 61-67 and abstract); wherein flow rate of material from the pump could be controlled as a function of duration time of said negative pressure.

Kleineidam discloses an apparatus for the conveyance of powdered material comprising a pump chamber 10 defined in part by a gas permeable member 50 disposed in a pressure chamber 52; wherein during pump operation material flows into said pump chamber 10 under negative pressure and material flows out of said pump chamber under positive pressure during a pump cycle (see col. 5, lines 61-67 and abstract); wherein flow rate of material from the pump could be adjustable independent of the pump cycle duration. Kleineidam further discloses a suction pinch valve (see 30 at inlet 14) and a delivery pinch valve (see 30 at outlet 18) that control flow of material in and out of the pump chamber respectively, said pinch valves having open/closed times

Art Unit: 3746

that are separately controllable from the pump cycle time. Kleineidam also discloses a control circuit (see Fig. 4 and col. 6, lines 14-62) that may adjust duration of time that the negative pressure is applied to the pressure chamber to adjust flow rate.

Furthermore, while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function, because apparatus claims cover what a device is, not what a device does (*Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)). Thus, if a prior art structure is capable of performing the intended use as recited in the preamble, or elsewhere in a claim, then it meets the claim.


### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Bertheaud whose telephone number is (571) 272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PJB 9/25/07

ANTHONY D. STASHICK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700